Logan (P. W.)

CATARRHAL MUCOUS MEMBRANE,

——A PAPER——

Read at the Annual Meeting of the

AMERICAN RHINOLOGICAL ASSOCIATION,

At St. Louis, Mo., October, 1884,

BY

P. W. LOGAN, M. D.,

Of Knoxville, Tenn.

Reprint from "The Southern Practitioner,"
January, 1885.

CATARRHAL MUCOUS MEMBRANE.

Gentlemen and Fellows of the American Rhinological Association:—Catarrhal Mucous Membrane of the upper air passages, being a subject too lightly considered by many medical men, is one to which we shall briefly direct our attention. Catarrhal trouble prevails to a greater extent, and is of more frequent occurrence, than any disease or class of diseases to which human flesh is heir. The profession generally pays less attention to this ailment, its symptoms, ætiology, reflex phenomena and treatment, than any other disease to which we are liable. Throat specialists, as a rule, resort to measures too harsh and irritating in the *treatment* of Catarrhal Mucous Membrane. Treatment should be repeated at proper intervals, and continued until all active symptoms are relieved. Usually improvement will continue after treatment has been discontinued, but in many cases a few treatments, each fall and spring, will be necessary until the diseased structures are made to "grow well." Dr. T. F. Rumbold, I believe, is the only author (if my memory serves me), who advises this course. As a rule, chronic diseases require chronic treatment. It is certainly the case in chronic catarrhal mucous membrane. The original seat of catarrhal conditions is often overlooked. We should realize the fact, that the nose was made to breathe through, that it is an important part of man, and more liable to disease than any other portion of the respiratory tract. We naturally breathe through the nose, the mouth being closed. This necessarily exposes its mucous membrane to some of the exciting causes of catarrhal inflammation; for instance, a change-

able, chilly atmosphere, an atmosphere containing dust and irritating gases, or an atmosphere vitiated and impure. The function of the mucous membrane of the nose being to moisten, warm and filter the air before it enters the larynx, necessarily renders the mucous membrane of the pharynx and larynx less liable to inflammation, excited by the causes just mentioned, than the schneiderian membrane. The original seat of catarrhal inflammation of the upper air passages is the schneiderian membrane. Simple, follicular or dry pharyngitis, laryngitis, tubal and aural catarrh, is preceded by, and is due to a coryza, either acute or chronic. Therefore, in treating Catarrhal Mucous Membrane of the upper air passages, we must recognize the fact, that a tubal, aural, pharyngeal, or laryngeal catarrh, does not exist, without the coëxistence of nasal catarrh; consequently it is necessary to treat the nasal disease simultaneously.

In the language of a German physician, referred to by Dr. Woakes, of London, in the last edition of his Post Nasal Catarrh, "in England he observed that doctors did not *interrogate* the nose."

Mackenzie, in his second volume of Diseases of Nose, Throat, etc., page 313, foot note, quotes from Dr. Rumbold's work on Hygiene and Treatment of Catarrh, complications, which he says are "fortunately not met with in this country."* Is it possible that the renowned Mackenzie has failed to "interrogate the nose?" In one instance, I feel sure that he failed to "interrogate the nose." I refer to the case of an M. D. and preacher of renown, who visited me at my office in Knoxville, b ing accompanied by Dr. Jno. M. Boyd and other friends. Dr. Boyd and myself examined him. He had formerly visited London, where he was treated by Dr. Mackenzie for laryngeal trouble, the brush having been used "ad finem." Suffice it to say, that this patient had chronic naso-pharyngeal, with slight laryngeal catarrh. On making a rhino-scopic examination of his case, we found muco-

* Dr. Rumbold's patient, mentioned in his Hygiene, etc, and referred to by Dr. Mackenzie, as an "unfortunate gentleman, whose nose was no doubt in an exceptionally morbid state," experienced the sensation, while walking, that he was sinking into the pavement up to his knees." Dr. Mackenzie adds: "Such complications of catarrh, however, are fortunately not met with in this country."

pus hanging from the turbinated processes, which reminded me of stalactites suspended from the roof of a cave. On asking whether he had had treatment for his nasal trouble, he replied, "That no one had ever made a rhino-scopic examination of his case." Is this not positive evidence of the truthfulness of the German's statement, (quoted by Dr. Woakes, of London,) with reference to the failure on the part of the English physicians to "interrogate the nose?" I do not like to be personal about this matter, but the doctor must, in this instance, reap as he has sown. Aside from this, it involves an important question of great interest to the profession, which is, failure on the part of physicians to "interrogate the nose."

Americans are certainly capable of making successful rhino-scopic and laryngo-scopic examinations. They most assuredly have had ample material from which they could record their observations, and with truthfulness, notwithstanding the failure on the part of the English to "interrogate the nose," or observe symptoms and "complications," which had been witnessed in America. The pharynx and larynx are frequently tortured by the mop or brush, saturated with irritating solutions for weeks and months, without recognizing the coëxistence of a chronic catarrhal condition of the schneiderian membrane.

It is of paramount importance in all cases of Catarrhal Mucous Membrane of the upper air passages, to examine anterior and p sterior nares, vault of pharynx, pharynx and larynx. Reflected laryngeal irritation or inflammation, is relieved by treatment of original nasal disease and larynx. The nose is too often overlooked; in the language of our German confrere, it is not sufficiently "interrogated" in the treatment of throat and ear diseases. While rheumatism is considered by some a cause of sore throat, in my opinion, it is generally a result of the catarrhal condition or diathesis: a sequence and not a cause of catarrhal inflammation. The usual cause of catarrhal inflammation of the upper air passages, is "taking cold" Each attack of cold renews and increases the catarrhal condition, until the patient complains of having cold, almost continually if not constantly. A patient in this condition is very liable to muscular rheuma-

tism, from the fact, that he takes cold very readily, and *taking cold produces rheumatism.* As the catarrhal habit is improved, the rheumatic manifestation is lessened, "pari passu," and the power of resisting deleterious effects of changes in the weather is increased. In other words, as the catarrhal diathesis is increased, the rheumatic trouble is increased. As the catarrhal habit is lessened, the occurrence of rheumatism is less frequent. There is no question of the fact, that muscular rheumatism is a frequent concomitant, and result of a catarrhal condition of the upper air passages. An established catarrhal habit renders the subject liable to pharyngitis, tonsillitis, uvalitis and laryngitis. Relieve the catarrhal condition, and you will very greatly lessen the liability to a recurrence of these troubles. A laryngitis should not be permitted to continue until serious inroads are made upon the general health, and a dyscrasia established. Indeed, feebleness of constitution should be promptly met by the enforcement of hygienic measures, and the proper local and constitutional treatment. Catarrhal patients, as a rule, require a tonic and sustaining course of treatment. The air passing over diseased surfaces thereby becoming contaminated, tends to lessen vital power. The local inflammation, with its various reflex phenomena and influences, is a source of systemic disturbance, and depressing to vital power. Its invasion of the accessory sinuses and its close proximity to the brain, renders it possible for Catarrhal Mucous Membrane to give rise to a vast amount of trouble. Not only the brain may become involved, but the senses of sight, hearing, taste, and olfaction, may be impaired or destroyed. Why should it not lessen vital power, or in the language of Dr. Woakes, produce a catarrhal dyscrasia? Is it not true, that catarrhal troubles of the upper air passages are much more common and of more frequent occurrence now, than they were fifty to one hundred years ago? Or did medical men, because of a want of information with reference to the nature of these troubles, fail to recognize their existence? It has occurred to me, that our present habits of life tend to the development of catarrhal inflammation, from the fact, that they are more enervating, and render us more liable to take cold. We live more in doors than formerly, having

our rooms too warm, and frequently not well ventilated, thereby breathing a heated and vitiated atmosphere. Whereas, if we were more out of doors in the open air, we would be less liable to take cold. Again, is it probable that our climate is more changeable now than formerly, or, are we more susceptible to the changes in the weather because of peculiar telluric influences? The English recognize us because of our nasal intonation. Why is a nasal intonation peculiar to the Americans? Our friends on the other side of the Atlantic certainly take cold, and suffer from catarrhal troubles, but are they affected to the same extent? I would like to hear from our President, (Dr. Rumbold), who has just returned from Europe, upon this subject. Changeable weather is certainly an important factor in the production of catarrhal troubles. Good vital power is necessary, in order that we may be enabled to resist changes in the weather and overcome disease. The use of tobacco not only lessens vital power, but weakens and congests the mucous membrane, thereby rendering it much more susceptible to inflammatory action. The scrofulous habit also predisposes us to the inception of catarrhal conditions. In the management of these troubles, this diathesis should be counteracted. We must look after the general condition of our patient, improve his general health, and remove all local troubles which tend to aggravate the catarrhal condition by reflex irritation or otherwise.

Not a little has been said about climate and its effects upon catarrhal subjects. While it is true, that patients are benefited by a change of climate, they are frequently made worse. It is well to recollect the old adage: "What is one man's food is another's poison." A climate that will suit one will prove injurious to another, but wherever persons take cold, there Catarrhal Mucous Membrane exists, therefore, if we could find a spot where persons never take cold, there we would find comparatively few catarrhal subjects. We, of course, recognize the fact, that the presence of growths in the upper air passages, and decayed teeth, are important factors in exciting and aggravating catarrhal inflammation. The smoke, soot, dust and vitiated atmosphere of the large cities, with indoor life, and

sedentary habits, coupled with venereal excesses, and other enervating habits, are also prolific causes of catarrhal inflammation of the upper air passages, either proximately or remotely. Catarrhal Mucous Membrane is the beginning of hay fever, June catarrh, rose catarrh, or peach cold, which should be treated upon the same principles as an ordinary catarrh, but the applications should be very gentle. See Dr. Rumbold's article upon this subject, in the August number, 1884, *St. Louis Med. and Surg. Journal.* Catarrhal inflammation may give rise to chorea, epilepsy and insanity. It may affect the memory, produce forebodings, discontentment and dissatisfaction. It lessens our ability to think closely and continuously, for a great length of time. In many instances where the throat is involved, reading aloud will soon cause it to break down.

It may give rise to neuralgic and rheumatic pains in head and face, or shoulders and arms. Hypertrophy, resulting from a catarrhal inflammation of the nasal mucous membrane, sometimes gives rise to obstructed nasal respiration and mouth-breathing. Woakes attributes buccal respiration entirely to post-nasal growths, and says "where it obtains to any great extent, the expression of the patient is markedly altered for the worse, the open mouth and pendulous lower lip imparting a vacant, almost stupefied appearance to the physiognomy." It is a condition unrecognized by many physicians, and one which predisposes a patient to pharyngitis, laryngitis and lung involvement, from the fact that the air, on entering the larynx, is not warm and moist, nor is it deprived of dust and other irritating qualities. Dr. Mackenzie is of the opinion that dust is the most common cause of post-nasal catarrh, and does not attach due importance to changeable weather, habits of life, etc. I am sure that smoke, soot, dust and gases, escaping from the smoke-stack of a railroad engine, will aggravate catarrhal inflammation to a greater extent and more quickly than any other foreign matter which may be brought in contact with the mucous membrane of the upper respiratory tract, but I am satisfied that *changeable weather* is the most *prolific cause.* I feel confident of this from the fact that patients who are not exposed to dust are apt to have

an aggravation of catarrhal trouble when they take cold, and as their catarrhal condition is improved, they take cold less frequently. An increased catarrhal condition renders a patient more liable to take cold, but after the local inflammation is very much subdued, he will not only to a greater degree resist changes in the weather, but he will also, in a great measure, resist the injurious effects of dust upon the mucous membrane, from the fact that in its improved condition it is enabled to rid itself of both mucous and the dust it may contain. A high degree of catarrhal inflammation is attended with the presence of a tenacious secretion and inability on the part of the mucous membrane to rid itself of the same; improvement is evidenced by diminished redness of the mucous membrane, lessened calibre of its blood-vessels, diminished and improved secretion, and increased power on the part of the mucous membrane to rid itself of excessive secretion. The treatment of catarrhal troubles should be mild, soothing and unirritating, vaseline or cosmoline being the best remedy, in my opinion, that can be applied. It is soothing, cooling, protective, alterative, unirritating and antiphogistic in the *literal* sense of the term. It is applicable in all cases. Dr. Woakes, under the head of treatment of atrophic catarrh of the pharynx, says: "For some time past I have found an oily basis as a vehicle for other remedies, of essential service in relieving the symptoms just referred to. In selecting such an oil, stability of composition is a paramount point; as a tendency to rancidity, through developing fatty acids would add to the source of irritation. After several trials, a derivative of petroleum, called adespine oil, furnished me by Mr. Bullock, has proved eminently satisfactory. It readily combines with certain volatile and essential oils, which lend themselves to the therapeutics of the disease, and being very diffusible, finds its way into the remotest crevices of the region, when sprayed through the nose or soft palate. Combined with it, I use the oil of cubebs, sandal-wood, eucalyptus and Scotch pine, in the proportion of one part of either of the preceding to 100 of adespine oil. From half a drachm to a drachm of this mixture, warm, is applied, by means of a spray apparatus, twice daily. It usually produces marked relief to the

soreness and stiffness of the part, and is very acceptable to the patient." In this Dr. Woakes is certainly correct. If he will only use vaseline alias "adespine oil" in the other varieties of Catarrhal Mucous Membrane, he will testify further to its efficacy. I would like to know the difference between adespine oil and vaseline or cosmoline. The vaseline idea originated with Dr. Thomas F. Rumbold, many years ago, but Dr. Woakes does not allude to it—nor does Dr. Robinson, of New York, who directs vaseline to be applied at night in the treatment of nasal catarrh. "Render to Cæsar the things that are Cæsar's." We can combine with vaseline, antiseptics, the essential oils, etc., which when made warm, can be sprayed through the nose, behind the soft palate, upon the pharynx and into larynx, trachea and bronchi. It is better to warm everything which is applied in the form of spray to Catarrhal Mucous Membrane. We invariably warm all detergents, as cold applications are unpleasant and especially injurious to the nasal mucous membrane. In many cases detergents are unnecessary, from the fact that the usual application of vaseline, combined with an astringent or some of the essential oils heretofore referred to, will cleanse sufficiently, and at the same time medicate the affected surface. Do no more in the way of treatment than is absolutely necessary. When a patient returns after having received a treatment with a new symptom, or an aggravation of his trouble, generally speaking, something has been done which should not be repeated. In some cases of naso-pharyngeal with laryngeal catarrh, it is better to leave off the astringent when spraying vault of pharynx and posterior nares, as it seems to aggravate the trouble. The pharynx and larynx bear astringent applications better than the nasal mucous membrane. This fact was clearly demonstrated in the case of W. C., a lawyer, who, while laboring under naso-pharyngeal and laryngeal catarrh, which had been greatly increased by recently-contracted cold, was treated by a medical friend on a mixed plan as follows, to-wit: Fluid cosmoline containing a few drops of compound pinus canadensis mixture was applied warm, in the form of spray to vault of pharynx and posterior nares, with a number four and five spray producer, and

to the lower pharynx with a number one—the epiglottis being touched with the brush saturated with a strong solution of nitrate of silver, and the cosmoline and astringent mixture was applied within the larynx with a number seven spray producer. The nitrate of silver was applied only once, the other remedies being continued for two weeks without relief, but on the other hand the patient was made worse, treatment being frequently interrupted by the occurrence of glottic spasm. In the above-described condition this patient was brought to me for treatment by a medical friend who was compelled to go South because of ill health. After examining the patient, I proceeded to fill up the cup of the spray producer with cosmoline, adding a few drops of the astringent mixture, whereupon he shook his head and remarked, "that he had had as much of that for the past two weeks as he cared to have." I insisted that he should submit to the treatment and he did so, but returned next morning saying that he was worse. Being satisfied that the aggravation of his condition was due to the treatment, I modified it by leaving off the compound pinus canadensis mixture in spraying vault of pharynx, posterior nares, but used said mixture with cosmoline in spraying lower pharynx and larynx. The patient enjoyed this treatment and returned next morning in an improved condition. There was no further recurrence of glottic spasm, but a continuance of uninterrupted improvment under the modified treatment. As we progress with our treatment we should note its effects from day to day, and as the patient improves, less treatment will be required. Treatment is usually necessary every day for a few days—then every other day for a few weeks—then twice a week for a few weeks—then once a week until all active symptoms are relieved. The more chronic cases will require some treatment each fall and spring for several years. Unless the good effects of treatment are followed up fall and spring, the patient in the course of a few years will find himself in as bad condition as previously. Chronic Catarrhal Mucous Membrane cannot be cured in a short time. During and after treatment it is very important to rigidly observe the laws of health, and avoid everything which tends to aggravate his

trouble. In the atrophic variety of Catarrhal Mucous Membrane, we think it is best to repeat treatment every day until the inflammation is so relieved that the secretions are thereby very greatly diminished, after which, treatment should be repeated less frequently, *pro re nata*. It should consist in the application of some detergent with a view of cleansing the diseased surfaces, followed by the application of vaseline containing a small quantity of oil of eucalyptus in the form of spray. Catarrhal patients should clothe themselves so as to keep warm, avoiding draughts, night air, vitiated air, dust, tobacco-smoke and the use of tobacco. They should not remain too much in heated rooms which are not well ventilated, but should take a reasonable amount of out-door exercise. In many cases a resort to the mountains or sea shore, after treatment, during the hot months, is indeed highly beneficial. The mineral waters, especially chalybeate and sulphur, are also good adjuvants. In short, improve the general condition, and subdue local inflammation by local applications of mild, soothing and unirritating remedies in the form of spray, it being more efficacious, pleasant and less irritating, in my opinion, than any other method.